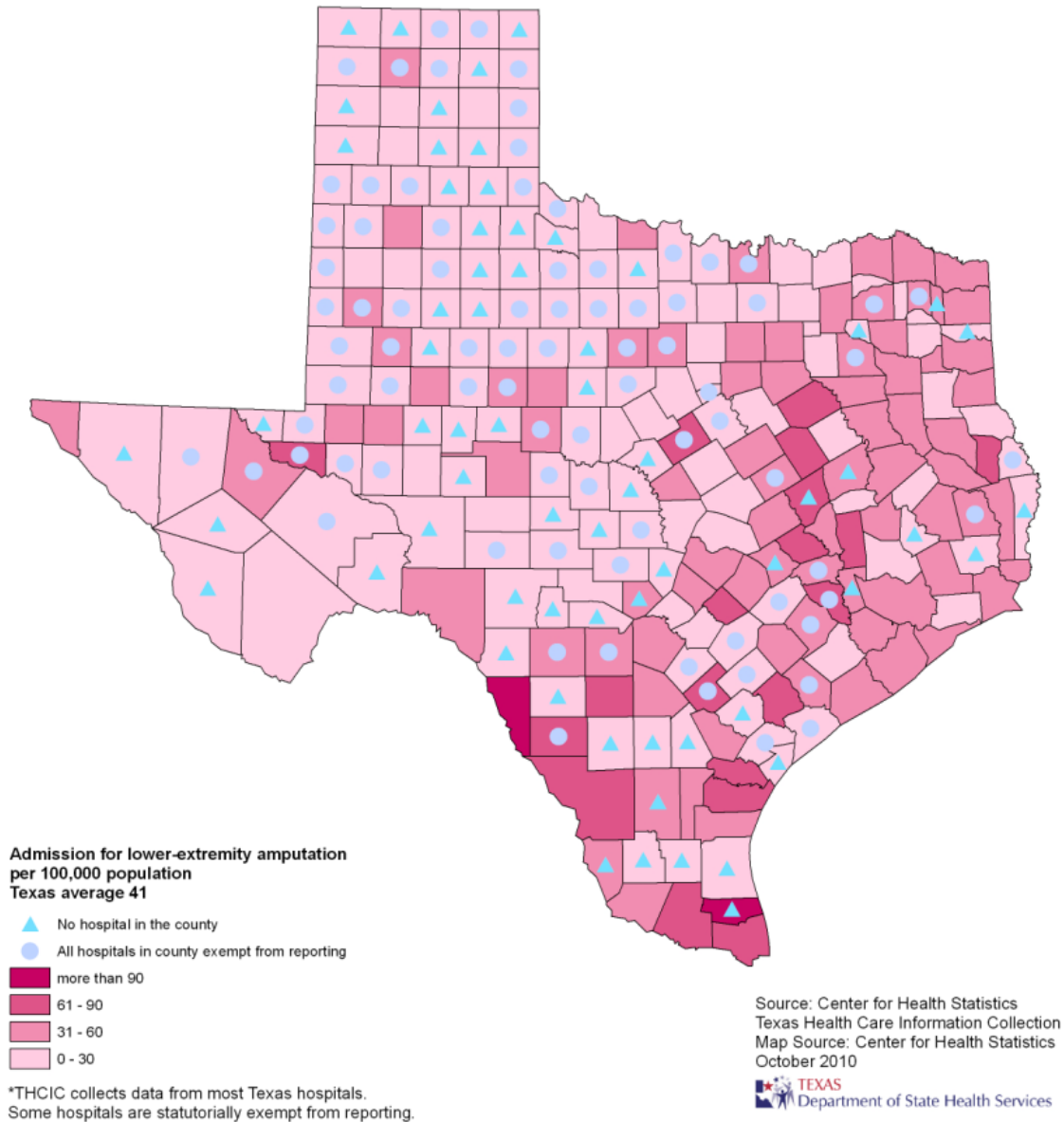# 14. Lower-Extremity Amputation Among Patients with Diabetes

Lower extremity amputation (LEA) is a costly and disabling procedure. According to the American Diabetes Association, about 60-70% of people with diabetes have mild to severe forms of diabetic nerve damage, which in severe forms, can lead to the need for lower limb amputations. In fact, diabetes is the most frequent cause of lower limb amputations that were not made necessary by an injury. The risk of a leg amputation is 15-40 times greater for a person with diabetes than for a non-diabetic. Each year, 56,200 people lose a foot or leg to diabetes.

Admission for lower-extremity amputation per 100,000 population
Texas average 41

▲ No hospital in the county

● All hospitals in county exempt from reporting

more than 90

61 - 90

31 - 60

0 - 30

*THCIC collects data from most Texas hospitals.
Some hospitals are statutorially exempt from reporting.

Source: Center for Health Statistics
Texas Health Care Information Collection
Map Source: Center for Health Statistics
October 2010

TEXAS
Department of State Health Services

Texas Health Care Information Collection
Lower-Extremity Amputation Among Patients With Diabetes Admission Rate, 2008

Rates not calculated for counties with fewer than 5 admissions
* Risk-adjusted admission rate is significantly lower than state average rate based on 95 percent confidence interval
** Risk-adjusted admission rate is significantly higher than state average rate based on 95 percent confidence interval

County	Admissions	Population	Observed Admissions per 100,000 Population	Expected Admissions per 100,000 Population	Risk-Adjusted Admissions per 100,000 Population	95% Confidence Interval for Risk-Adjusted Admissions
State of Texas	6,933	17,584,200	39.43	26.40	41.27	(40.46, 42.08)
Anderson	20	47,168	42.40	26.58	45.08	(29.44, 60.72)
Andrews	Less than 5					
Angelina	34	62,551	54.36	30.35	50.60	(37.90, 63.31)
Aransas	8	20,384	39.25	39.04	28.41	(8.78, 48.03)
Archer	Less than 5					
Armstrong	Less than 5					
Atascosa	16	32,507	49.22	28.22	49.29	(31.01, 67.57)
Austin	15	20,675	72.55	32.03	64.00**	(42.49, 85.52)
Bailey	Less than 5					
Bandera	5	16,468	30.36	35.17	24.40	(1.39, 47.40)
Bastrop	21	55,236	38.02	27.54	39.01	(24.81, 53.20)
Baylor	Less than 5					
Bee	7	27,029	25.90	23.63	30.97	(9.06, 52.87)
Bell	44	183,259	24.01	24.87	27.28*	(19.08, 35.49)
Bexar	640	1,157,792	55.28	26.45	59.05**	(55.89, 62.22)
Blanco	Less than 5					
Borden	Less than 5					
Bosque	Less than 5					
Bowie	38	72,389	52.49	29.78	49.81	(37.89, 61.74)
Brazoria	73	216,445	33.73	26.17	36.42	(29.06, 43.77)
Brazos	34	127,316	26.71	17.85	42.27	(30.66, 53.88)
Brewster	Less than 5					
Briscoe	Less than 5					
Brooks	Less than 5					
Brown	6	30,700	19.54	32.42	17.04*	(0.00, 34.59)
Burleson	10	13,367	74.81	33.84	62.47	(36.44, 88.51)
Burnet	10	34,925	28.63	36.84	21.96*	(6.53, 37.40)
Caldwell	18	27,907	64.50	27.97	65.15**	(45.34, 84.97)
Calhoun	Less than 5					
Callahan	Less than 5					
Cameron	154	264,059	58.32	27.18	60.63**	(54.10, 67.17)
Camp	Less than 5					
Carson	Less than 5					
Cass	14	24,159	57.95	35.78	45.76	(26.93, 64.59)
Castro	Less than 5					

Source: Texas Health Care Information Collection. Texas Hospital Inpatient Discharge Public Use Data File, 2008.

Texas Health Care Information Collection
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County	Admissions	Population	Observed Admissions per 100,000 Population	Expected Admissions per 100,000 Population	Risk-Adjusted Admissions per 100,000 Population	95% Confidence Interval for Risk-Adjusted Admissions
Chambers	Less than 5					
Cherokee	24	37,336	64.28	30.75	59.08**	(42.74, 75.42)
Childress	Less than 5					
Clay	Less than 5					
Cochran	Less than 5					
Coke	Less than 5					
Coleman	Less than 5					
Collin	71	524,278	13.54	23.10	16.57*	(11.54, 21.60)
Collingsworth	Less than 5					
Colorado	12	16,592	72.32	35.24	58.00	(35.10, 80.90)
Comal	25	80,520	31.05	30.56	28.71*	(17.55, 39.87)
Comanche	Less than 5					
Concho	Less than 5					
Cooke	11	30,030	36.63	31.54	32.81	(14.82, 50.80)
Coryell	10	56,070	17.83	18.07	27.89	(10.49, 45.28)
Cottle	Less than 5					
Crane	Less than 5					
Crockett	Less than 5					
Crosby	Less than 5					
Culberson	Less than 5					
Dallam	Less than 5					
Dallas	630	1,729,044	36.44	24.49	42.04	(39.35, 44.73)
Dawson	5	11,112	45.00	30.43	41.78	(11.67, 71.89)
Deaf Smith	Less than 5					
Delta	Less than 5					
Denton	72	440,803	16.33	21.14	21.84*	(16.10, 27.57)
Dewitt	5	16,338	30.60	34.03	25.41	(1.93, 48.89)
Dickens	Less than 5					
Dimmit	6	7,442	80.62	29.77	76.53	(39.33, 113.73)
Donley	Less than 5					
Duval	5	9,340	53.53	32.36	46.75	(14.90, 78.59)
Eastland	Less than 5					
Ector	44	92,876	47.37	27.78	48.20	(37.29, 59.10)
Edwards	Less than 5					
Ellis	39	105,148	37.09	25.80	40.62	(29.99, 51.25)
El Paso	263	519,684	50.61	26.53	53.91**	(49.19, 58.62)

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County	Admissions	Population	Observed Admissions per 100,000 Population	Expected Admissions per 100,000 Population	Risk-Adjusted Admissions per 100,000 Population	95% Confidence Interval for Risk-Adjusted Admissions
Erath	Less than 5					
Falls	5	13,490	37.06	32.44	32.28	(5.82, 58.75)
Fannin	9	27,025	33.30	32.47	28.98	(10.29, 47.67)
Fayette	Less than 5					
Fisher	Less than 5					
Floyd	Less than 5					
Foard	Less than 5					
Fort Bend	108	371,048	29.11	23.50	34.99*	(29.06, 40.92)
Franklin	Less than 5					
Freestone	Less than 5					
Frio	9	12,350	72.87	27.48	74.93**	(44.88, 104.98)
Gaines	Less than 5					
Galveston	96	218,670	43.90	28.55	43.46	(36.45, 50.47)
Garza	Less than 5					
Gillespie	8	19,623	40.77	40.64	28.35	(8.74, 47.95)
Glasscock	Less than 5					
Goliad	Less than 5					
Gonzales	Less than 5					
Gray	Less than 5					
Grayson	31	93,065	33.31	31.45	29.93*	(19.69, 40.16)
Gregg	48	89,252	53.78	29.68	51.21	(40.45, 61.96)
Grimes	17	20,431	83.21	32.02	73.44**	(51.79, 95.08)
Guadalupe	24	83,867	28.62	28.46	28.41*	(17.08, 39.74)
Hale	11	26,393	41.68	29.15	40.40	(20.44, 60.36)
Hall	Less than 5					
Hamilton	6	6,665	90.02	38.09	66.79	(32.04, 101.54)
Hansford	Less than 5					
Hardeman	Less than 5					
Hardin	8	40,163	19.92	29.99	18.77*	(2.81, 34.72)
Harris	992	2,851,478	34.79	24.56	40.02	(37.93, 42.12)
Harrison	19	49,779	38.17	30.29	35.60	(21.35, 49.86)
Hartley	Less than 5					
Haskell	Less than 5					
Hays	47	103,183	45.55	21.55	59.73**	(47.99, 71.48)
Hemphill	Less than 5					
Henderson	24	64,198	37.38	34.08	30.99	(19.16, 42.83)

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Texas Health Care Information Collection
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County	Admissions	Population	Observed Admissions per 100,000 Population	Expected Admissions per 100,000 Population	Risk-Adjusted Admissions per 100,000 Population	95% Confidence Interval for Risk-Adjusted Admissions
Hidalgo	339	466,319	72.70	24.82	82.78**	(77.63, 87.92)
Hill	9	28,081	32.05	33.14	27.33	(9.18, 45.48)
Hockley	Less than 5					
Hood	6	40,068	14.97	35.18	12.03*	(0.00, 26.77)
Hopkins	9	26,199	34.35	31.44	30.87	(11.58, 50.17)
Houston	10	18,831	53.10	35.24	42.58	(21.09, 64.08)
Howard	10	25,829	38.72	30.54	35.82	(16.11, 55.53)
Hudspeth	Less than 5					
Hunt	24	65,251	36.78	29.32	35.45	(22.79, 48.11)
Hutchinson	5	17,222	29.03	33.76	24.30	(1.34, 47.26)
Irion	Less than 5					
Jack	Less than 5					
Jackson	6	11,015	54.47	33.54	45.90	(17.09, 74.70)
Jasper	18	27,498	65.46	33.60	55.06	(36.84, 73.27)
Jeff Davis	Less than 5					
Jefferson	94	189,562	49.59	30.14	46.50	(39.17, 53.82)
Jim Hogg	Less than 5					
Jim Wells	18	30,247	59.51	29.66	56.69	(38.21, 75.17)
Johnson	44	114,276	38.50	27.01	40.29	(30.32, 50.26)
Jones	Less than 5					
Karnes	8	12,624	63.37	27.15	65.96	(36.05, 95.86)
Kaufman	18	71,115	25.31	25.76	27.76*	(14.83, 40.70)
Kendall	10	23,950	41.75	32.44	36.37	(16.51, 56.23)
Kenedy	Less than 5					
Kent	Less than 5					
Kerr	9	38,710	23.25	40.02	16.42*	(2.35, 30.48)
Kimble	Less than 5					
King	Less than 5					
Kinney	Less than 5					
Kleberg	7	23,062	30.35	26.51	32.36	(9.96, 54.75)
Knox	Less than 5					
Lamar	15	38,769	38.69	32.66	33.48	(17.92, 49.03)
Lamb	Less than 5					
Lampasas	7	16,455	42.54	31.69	37.93	(13.68, 62.17)
La Salle	Less than 5					
Lavaca	9	15,284	58.89	38.19	43.57	(20.65, 66.48)

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Texas Health Care Information Collection
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County	Admissions	Population	Observed Admissions per 100,000 Population	Expected Admissions per 100,000 Population	Risk-Adjusted Admissions per 100,000 Population	95% Confidence Interval for Risk-Adjusted Admissions
Lee	5	12,717	39.32	32.63	34.05	(6.87, 61.22)
Leon	6	13,377	44.85	36.94	34.30	(9.40, 59.21)
Liberty	27	58,057	46.51	27.14	48.42	(34.47, 62.36)
Limestone	12	17,905	67.02	31.44	60.23	(36.89, 83.56)
Lipscomb	Less than 5					
Live Oak	Less than 5					
Llano	Less than 5					
Loving	Less than 5					
Lubbock	53	196,532	26.97	25.90	29.42*	(21.66, 37.18)
Lynn	Less than 5					
McCulloch	Less than 5					
McLennan	59	173,684	33.97	27.45	34.97	(26.95, 42.99)
McMullen	Less than 5					
Madison	Less than 5					
Marion	Less than 5					
Martin	Less than 5					
Mason	Less than 5					
Matagorda	13	28,312	45.92	31.59	41.07	(22.56, 59.59)
Maverick	51	35,112	145.25	27.51	149.20**	(131.39, 167.01)
Medina	16	33,796	47.34	29.55	45.27	(27.75, 62.79)
Menard	Less than 5					
Midland	32	92,884	34.45	28.90	33.69	(23.00, 44.38)
Milam	8	19,306	41.44	34.14	34.30	(12.73, 55.86)
Mills	Less than 5					
Mitchell	Less than 5					
Montague	Less than 5					
Montgomery	80	303,223	26.38	26.22	28.43*	(22.22, 34.64)
Moore	7	14,082	49.71	28.37	49.51	(21.81, 77.21)
Morris	5	10,398	48.09	35.26	38.54	(9.62, 67.45)
Motley	Less than 5					
Nacogdoches	17	47,729	35.62	26.12	38.53	(22.85, 54.21)
Navarro	24	38,032	63.10	29.61	60.22**	(43.72, 76.72)
Newton	Less than 5					
Nolan	8	11,257	71.07	34.17	58.77	(30.54, 87.00)
Nueces	190	241,491	78.68	28.83	77.12**	(70.49, 83.76)
Ochiltree	Less than 5					

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Oldham	Less than 5					
Orange	26	65,660	39.60	31.62	35.39	(23.24, 47.54)
Palo Pinto	9	21,712	41.45	32.82	35.69	(14.95, 56.43)
Panola	7	18,309	38.23	33.08	32.66	(10.16, 55.15)
Parker	25	83,886	29.80	28.19	29.88*	(18.49, 41.26)
Parmer	Less than 5					
Pecos	Less than 5					
Polk	18	38,503	46.75	35.14	37.59	(22.54, 52.64)
Potter	20	89,198	22.42	27.58	22.97*	(11.81, 34.13)
Presidio	Less than 5					
Rains	Less than 5					
Randall	16	87,242	18.34	27.55	18.81*	(7.52, 30.11)
Reagan	Less than 5					
Real	Less than 5					
Red River	7	10,920	64.10	36.77	49.26	(21.63, 76.89)
Reeves	5	8,602	58.13	33.54	48.95	(16.36, 81.54)
Refugio	Less than 5					
Roberts	Less than 5					
Robertson	13	12,368	105.11	33.86	87.72**	(60.66, 114.77)
Rockwall	7	52,789	13.26	25.04	14.96*	(0.00, 30.19)
Runnels	5	8,315	60.13	37.01	45.91	(14.35, 77.48)
Rusk	6	38,637	15.53	31.88	13.76*	(0.00, 29.54)
Sabine	Less than 5					
San Augustine	6	7,175	83.62	38.60	61.23	(27.96, 94.49)
San Jacinto	5	19,904	25.12	33.93	20.92	(0.00, 42.22)
San Patricio	39	50,607	77.06	29.43	74.00**	(59.65, 88.34)
San Saba	Less than 5					
Schleicher	Less than 5					
Scurry	Less than 5					
Shackelford	Less than 5					
Shelby	Less than 5					
Sherman	Less than 5					
Smith	74	150,121	49.29	30.48	45.71	(37.52, 53.89)
Somervell	Less than 5					
Starr	20	40,125	49.84	25.84	54.51	(37.31, 71.70)
Stephens	5	7,669	65.20	33.75	54.58	(20.17, 88.99)

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Sterling	Less than 5					
Stonewall	Less than 5					
Sutton	Less than 5					
Swisher	Less than 5					
Tarrant	436	1,244,658	35.03	24.97	39.65	(36.50, 42.79)
Taylor	31	95,116	32.59	28.47	32.34	(21.71, 42.98)
Terrell	Less than 5					
Terry	6	9,372	64.02	31.81	56.87	(24.81, 88.94)
Throckmorton	Less than 5					
Titus	8	21,764	36.76	28.36	36.62	(14.34, 58.91)
Tom Green	28	80,261	34.89	29.85	33.03	(21.72, 44.34)
Travis	232	713,986	32.49	21.81	42.10	(37.66, 46.53)
Trinity	Less than 5					
Tyler	7	16,784	41.71	34.15	34.51	(11.38, 57.63)
Upshur	7	29,849	23.45	32.25	20.55*	(2.70, 38.39)
Upton	Less than 5					
Uvalde	11	19,615	56.08	30.86	51.34	(28.84, 73.85)
Val Verde	19	34,398	55.24	32.00	48.77	(32.08, 65.46)
Van Zandt	18	42,097	42.76	34.10	35.44	(20.82, 50.05)
Victoria	53	64,596	82.05	30.81	75.24**	(62.83, 87.65)
Walker	26	54,283	47.90	22.73	59.55**	(43.79, 75.31)
Waller	9	27,291	32.98	25.40	36.69	(15.66, 57.72)
Ward	6	7,732	77.60	33.81	64.84	(30.60, 99.08)
Washington	10	25,446	39.30	32.68	33.98	(14.78, 53.18)
Webb	81	149,300	54.25	23.46	65.34**	(55.99, 74.70)
Wharton	9	31,180	28.86	31.14	26.19	(8.42, 43.96)
Wheeler	Less than 5					
Wichita	38	96,264	39.47	28.76	38.78	(28.26, 49.31)
Wilbarger	Less than 5					
Willacy	16	14,825	107.93	28.78	105.98**	(79.17, 132.78)
Williamson	56	264,138	21.20	24.09	24.87*	(17.93, 31.81)
Wilson	7	30,027	23.31	28.85	22.84	(4.02, 41.65)
Winkler	Less than 5					
Wise	9	45,104	19.95	28.12	20.05*	(4.50, 35.59)
Wood	16	34,584	46.26	36.81	35.51	(20.00, 51.03)
Yoakum	Less than 5					

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Young	5	14,276	35.02	35.44	27.92	(3.31, 52.54)
Zapata	5	9,432	53.01	29.93	50.05	(17.10, 83.00)
Zavala	Less than 5					

Source: Texas Health Care Information Collection. Texas Hospital Inpatient Discharge Public Use Data File, 2008.